THE DEPARTMENT OF ENERGY

PRESS BRIEFING ON
PREPARATION FOR HURRICANE SEASON

TUESDAY, MAY 30, 2006
10:00 A.M.

SPEAKERS:

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THE MINERALS MANAGEMENT SERVICE

KEVIN KOLEVAR,
DIRECTOR,
OFFICE OF ELECTRICITY DELIVERY
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RED CAVANEY,
PRESIDENT AND CEO,
AMERICAN PETROLEUM INSTITUTE

MODERATOR: DREW MALCOMB

DREW MALCOMB: Good morning, and thank you for joining us today at our press conference to discuss recovery from hurricane season 2005, which is continuing, and preparation for hurricane season 2006. Our discussions today will include the importance of oil and gas resources in the Gulf of Mexico, the emphasis on operation safety, and the improvements that we have instituted since hurricane season 2005.

We have three speakers today who will each offer brief comments from their respective organizations. At the conclusion of those comments I will open the floor to any questions you may have.

First, Elmer P. Danenberger, who goes by "Bud," is the chief of Offshore Regulatory Programs for the Minerals Management Service with responsibilities for safety and pollution prevention and research, engineering support, operating regulations, and MMS's inspection and enforcement programs. Bud earned a Bachelor of Science degree in petroleum and natural gas engineering and a master's degree in environmental pollution control, both from Pennsylvania State University. He has been employed as an engineer in the Department of the Interior's offshore oil and gas program since 1971.

Bud Danenberger.

ELMER P. DANENBERGER III: Thank you, Drew.

Well, there's been unprecedented attention being given to the startup of the hurricane season this year, and for good reason given the tragedies -- personal tragedies and disruption to the economy from hurricanes over the past two years.

Our interest in the MMS offshore program is in the Outer Continental Shelf where there are roughly 30,000 people who live and work every day, and their work is becoming increasingly important to the 300 million Americans who live onshore.

So our interest in the MMS is strictly the Outer Continental Shelf waters. We have three priorities. Our highest priority is the safety of the workforce. Second priority is to make sure there isn't any uncontrolled flow from any of the wells that are being drilled or producing offshore. And our third priority is minimizing property damage and the loss of production to the economy. I'm going to take those in order, spend most of the time on the third issue, which is the one that was the most significant last year.

Highest priority: protection of personnel, workers offshore. We're pleased to say that again last year, Katrina and Rita, there were no fatalities and no significant injuries during the hurricane, during the evacuation prior, and during the resumption of activities immediately after the hurricane.

There is a culture in the Gulf offshore of evacuating people, being very conservative, following closely the reporting, the hurricane tracking. And this industry has had an outstanding record for many years in safely managing their staff and giving that the highest priority. We in MMS don't have any regulations, haven't needed to have any regulations that tell the industry what to do about getting their personnel out of the way in time of a hurricane.

We do have some concerns. Sudden storms can emerge quickly in the Gulf. That might make it difficult to evacuate people in some circumstances. Operations are getting farther and farther offshore, 200 miles out, more dispersed; that's a concern. So the advanced planning becomes more and more critical as the operations go farther and farther from shore. There is a lot of work being done and will continue to be done in those areas.

Our second priority is making sure there isn't any uncontrolled wet flow from wells that might be damaged or facilities that might be damaged by a hurricane. And again, the record last year was very good. Subsurface safety valves are required at least 100 feet below the sea floor for oil-producing wells. They all performed effectively at damaged facilities during both Katrina and Rita.

Going back to Andrew in 1992 where there was significant damage to facilities, Lily, 2002; Ivan, 2004; and then two hurricanes last year, subsurface safety valves have held on every occasion. We attribute this to some excellent standards promulgated by API of some of our regulations; some quality assurance work, again, under the auspices of API; and a commitment on everybody's part to make sure that these devices are of the highest quality and performance level.

The third priority is minimizing damage to facilities and disruption to the economy from loss of production. And last year there was -- as you know, there was considerable damage, some of it indicated up here: 113 facilities destroyed; over 3,000 platforms were in the path of either Ivan, Katrina or Rita, so there was substantial exposure there; a number of minor spills from vessels and facilities that were damaged, but nothing serious, no oil from the OCS that reached the coastline, no birds oiled, no damage to wildlife that was detected or observed.

We think, with Mars -- Shell's platform Mars -- resuming production, ramping up right now, that it will soon be back to shut-in amounts of less than 10 percent on both oil and the gas side. So it should be almost back to full production as we start the next hurricane season.

Of course, it's been a very busy off-season for the operators and contractors that work offshore: ourselves in MMS, DOE, Coast Guard, and everybody involved. The insurance industry has been very active as well, as you can imagine. Their losses were 20 times their receipts last year, so they've been very much interested in all this.

Our highest priority on the damage and equipment performance area, facilities and performances, have been the MODUs, or the mobile offshore drilling units, where last year a number of rigs broke loose during Katrina and Rita -- no major damage, but still a significant threat, not just to other facilities but to pipelines as they drag anchors.

November 17th of last year, Secretary Norton brought together leaders from the offshore industry to give them her concerns about this issue and to hear from them what their plans might be. And there has been a tremendous amount of work done since -- I think, most importantly, two new API standards: Recommended Practice 95J for jack-up rigs and Recommended Practice 95F for floating rigs. Both of those are now issued and available on API's website. We have since

quickly incorporated those recommended practices into our regulations, and we're expecting all operators to follow those this year.

What do they mean? They mean in terms of jack-ups, the principal failures were related to foundation failures on the sea floor, or inundation of the hull because of insufficient air gap between the water surface and the working surface of the rig. The new standard increases the air gap that's required and mandates certain geotechnical work before you initiate your drilling operations; also establishes some preloading requirements for the legs and the jack-ups.

Ninety-five F -- another really huge piece of work; some tremendous leadership shown there. Both of these recommended practices were produced in record time, and they're quality documents. It was not just a rush job. We were very much engaged, as was Coast Guard and others, in this industry process.

But among the improvements there are the analyses: How well will this rig perform with this anchor pattern at this location? A lot of mobile drilling units are being upgraded, the number of mooring lines increased from eight to either 12 or 16. This will substantially increase their holding capability. Of course, a lot of this work is still in progress and won't be completed by this hurricane season.

Some substantial improvements in anchor technology. You see an anchor behind me, a vertically loaded anchor, which shows real promise for exceptional holding in the deep-water environment of the Gulf. Looking at stronger mooring lines in both the chain and the wire rope. Also increased look at polyester, which has outstanding holding capabilities and less weight, which facilitates improved operation. Again, increased site-assessment work, also for the moored rigs, and a risk assessment for each site. What are the probabilities of failures? What would be the failure mode?

Another thing that we've insisted on for this upcoming year and the operators and drilling contractors have agreed to is kind of a black box capability on all of the MODUs such that if a MODU does fail when it's evacuated, that it would be recording information leading up to that failure: tensions on the anchors, heave, pitch, roll, and other performance indicators for that mobile drilling rig.

It's not just on MODUs where there's been a lot of work done, but also on platforms, fixed-production platforms. There were some phenomenal waves during Katrina and Rita. They found some dead fish at the plus-110 level on Shell's Mars platform. Gives you a sense of what type of wave heights that were experienced.

And there's been a whole change in thinking about the Metocean criteria being upgraded such that there'll be stricter design criteria for offshore facilities. Additional measures being taken, including stockpiling equipment so repairs can be made faster; piping changes on major production platforms that will facilitate barging if there is damage to pipeline systems.

Also one thing we learned during 2005 was that maintaining effective communications after the hurricanes was absolutely critical. We've got some new refinements to our eWell Reporting

System that will allow operators to send in all of their damage and production shut-in reports electronically. Very pleased with this new system. About 90 percent of the operators are now using it for a lot of their application work.

Also have a backup Web server in Denver this year so that we'll be well protected if our server in New Orleans goes down. This year the U.S. Coast Guard is going to be embedding one of their officers in our Continuation of Operations Office, so we'll be working directly with the Coast Guard in the same unit.

And we've also established specific communication lines with the Department of Energy, and we've divided our responsibilities so it's very clear who will be reporting to whom and how. So we're very pleased with that working relationship as well.

And we're going to try again, as always, to provide regular updates on our websites, as much information as we can. And hopefully there won't be too many occasions for it this year, but we feel like there's been a tremendous amount of work done. As much as possible has been done in the off-season. We're not about to declare victory. If there are storms like last year there's going to be damage again. But we think it will be minimized and we're going to continue to work for further improvements as the season goes on.

So thank you for your time, and I'll turn the podium over to Kevin Kolevar -- or back to Drew.

MR. MALCOMB: Thank you, Bud.

Next we have Kevin Kolevar, who was named director of the Department of Energy's Office of Electricity Delivery and Energy Reliability in February 2005. Kevin's office develops and helps implement national policy pertaining to electricity transmission and distribution, electric grid reliability, and associated research and development. Kevin was graduated from the University of Michigan, receiving a bachelor of arts in political science.

Kevin.

KEVIN KOLEVAR: Thank you, Drew.

I'm pleased to be here today. That's not an exaggeration. The cooling unit is broke at GSA, and so the temperature -- (laughter) -- the temperature in the Department of Energy is 85 degrees and climbing. So I'm prepared to stay here all afternoon.

But good morning. It's a pleasure to be here to make a statement on the Department of Energy's 2006 hurricane preparedness activities. I want to thank MMS and API for their efforts in arranging this roundtable. I think it's important to discuss this as we head into the coming season. And I would note that it's partnerships and coordinating efforts such as you see here today that are paramount to helping us respond to any future energy crisis.

Everybody knows that in less than 48 hours the 2006 hurricane season will officially start, and for the most part the energy sector has recovered from the 2005 hurricane season. While we do not have 100 percent of our oil and natural gas offshore production back online, we've seen significant progress in this sector over the past few months. The good news is that no refineries remain shut down as a result of the 2005 hurricanes. Our pipelines are operational as well. And as you'll recall, during Hurricanes Katrina and Rita we had 11 and 20 refineries shut down respectively. Many refineries experienced significant water and wind damage. In addition several pipelines were also shut down, causing tight supplies of petroleum products throughout much of the nation, particularly the Midwest and Mid-Atlantic States.

Before I speak to what we have planned for this upcoming season, let me briefly comment on DOE's responsibilities during energy emergencies.

The Department of Energy is the lead federal agency in the energy sector. In the event of an emergency, DOE monitors and produces daily situation reports about the energy infrastructure; deploys staff into the field; facilitates training and planning across state and local government agencies, as well as coordinating exchanges of loans of crude oil from the SPRO if necessary; and generally works to remove impediments to industry's efforts to recover their energy sector assets.

In coordination with the Department of Homeland Security, DOE is tasked with the responsibility of protecting U.S. energy infrastructure, establishing policies and procedures regarding preparedness for and prevention of attacks to U.S. energy sources, and response and recovery due to shortages and disruptions in the supply and delivery of electricity, oil, natural gas and the like that threaten to impact large populations in the United States.

DOE's Office of Electricity Delivery and Energy Reliability, the office I represent, is the lead for the National Response Plan's Emergency Support Function 12, which is energy. It sounds a little arcane, but all of the sectors have emergency support function assignments. We plug into FEMA. We become operational when deployed by FEMA. Ours of course is energy.

The purpose of ESF 12 is to restore damaged energy systems or components during an actual or potential emergency of national significance. We can and do provide expertise, utility coordination, and the collection and distribution of information through situation reports. We monitor the energy infrastructure and share information with federal, state and industry officials as well as the public. And, in coordination with DHS, including FEMA and the Coast Guard, as well as state, local and tribal governments, DOE priorities plans and actions for the restoration of energy during response and recovery operations. In addition, we work very closely with MMS, the Environmental Protection Agency, and the Department of Transportation makes certain energy fuels are available to first responders and American citizens.

Since the hurricanes of 2005, the petroleum sector and the other energy sectors have done a tremendous amount of work to prepare for the upcoming hurricane season. And I'll be happy to speak to some of those in the Q&A if you wish. I'll speak for a moment, however, to the actions that the DOE has undertaken to help prepare ourselves and help the private sector prepare for this summer.

To start off, the DOE hosted the Energy Leadership Forum in Tunica, Mississippi, on January 19th and 20th of this year. It was a first-of-a-kind forum that brought together key officials from federal, state and local governments, and all portions of the energy sector to share lessons learned and share best practices. An after-action report was released in February of this year. Over the next several weeks the individual energy sectors will be conducting follow -up meetings with the electricity and oil and gas industries.

The DOE will also have a much greater number of technical and emergency staff capable of being deployed within an affected region and embedded in other federal responding agencies such as DHS and FEMA. DOE issued a broad call for ESF 12 volunteers throughout the Department of Energy complex and the PMAs, the power marketing administrations, and the response has been outstanding. And our office is conducting new training workshops for individuals that are expected to deploy.

The department has also improved its modeling and analytical capability and its visualization capability through its work with labs, outside organizations, and industry. And DOE is coordinating with federal agencies such as FEMA, DHS, MMS, and some of the others that I mentioned, to improve federal response to energy emergencies. And I think, as Bud knows, that includes the numerous hurricane preparedness exercises that DHS and FEMA have been conducting over the last several months. Of course, we continue to work with the states to help them improve their energy assurance plans through the use of the state energy assurance guidelines.

And lastly I'll mention a new effort that was really brought to -- it was a request made by the petroleum sector, and that is that the DOE will now be establishing a new toll-free hotline, a communications line, a number of communications lines, for the 2006 hurricane season to allow state and local governments and the energy sector companies themselves to contact DOE directly and have an immediate point of contact within the agency.

So I want to thank you for that. I will note in closing, and then take questions, that the 2005 hurricane season was unprecedented in damage; never before had the energy sector seen the kind of devastation that we experienced. But I will tell you that the recovery in our opinion and my opinion was, frankly, spectacular. The fact that the sector was able to come back up so quickly with minor disruptions is a testament not only to the resilience of the energy sector, but probably chiefly to the people, the men and women that work in the energy sector -- and I think Red knows this better than anybody here -- that face great hardship both in their living conditions and the state of their family's living conditions, to show up to work every day and really serve the American public by getting these energy assets back online and maintaining the fuel supplies and energy supplies throughout the country.

So thank you very much.

MR. MALCOMB: Thank you, Kevin.

Next we have Red Cavaney, president and chief executive officer of API, the American Petroleum Institute, the national trade association of the U.S. oil and natural gas industry. He's

headed major trade groups in Washington for more than 20 years and served as a senior member of the White House staffs of Presidents Nixon, Ford and Reagan.

Red.

RED CAVANEY: It's indeed an honor to be here. I won't go into a lot of detail because I think both Bud and Kevin have covered well a lot of heroic work we've done. But I would like to make a couple of major points, and then of course we'll deal with any detail during the question session.

Oftentimes industry and government are criticized when things don't go well, but I'm here to tell you that this is a textbook case of where industry and government at the federal level as well as the state and local level, without a playbook in front of them, got together and created literally miracles.

To think that the storms that we faced, particularly out in the Gulf, were unprecedented, as Kevin said -- it had been 90 years since two Category 5 hurricanes had swept through the Gulf. Category 5 hurricanes created winds in excess of 200 miles per hour and seas of over 100 feet. Those are pretty, pretty testing conditions in which to operate.

The GAO in looking back and doing an analysis concluded, as Kevin had said, this was the worst natural disaster to ever strike the energy industry and estimated that the replacement cost would be somewhere between $18 (billion) and $31 billion.

The industry, government and everyone didn't stand there and rest on their laurels. They immediately got to work. And the number of conferences that were held, both at the federal level, including industry as well as at the state and local level among law enforcement, among industry and all, I think are almost impossible to calculate.

And that, again, is testament to the commitment that government and industry has to do it right. When you stop and think that there wasn't a single production-related spill out in the Gulf of any significance and no lives were lost, it tells you, that's a pretty high hurdle to beat. But nonetheless government and industry again together decided that there were a lot of things that we could learn from, and there were a lot of things that we could correct. And we've been heavy at work at it.

As was mentioned by Bud, two brand new recommended practices issued in the first year, another one very soon to be issued and constantly improved upon, I think shows the kind of commitment that government and industry have to protecting the consumer and to doing it right.

So with that having been said, I want to salute all of our colleagues in government and in industry for the collaborative, cooperative spirit of saying, we did it as good as you (could do ?), but we can do it a lot better next time.

So I look forward to answering any of your questions. Thank you.

MR. MALCOMB: Thank you, Red. Thank you, gentlemen.

We'll open the floor now to questions. If you would please identify yourself and your media affiliation and to whom your question is addressed.

Yes.

Q: A broad question and a -- I'm Stephanie Cohen with MarketWatch -- broad question and a specific one for Mr. Danenberger, if you would. A broad question would be, help me understand a little bit your confidence level if we were to see, let's just say worst-case scenario, three Category 5 hurricanes again? Are we looking at fewer shut-in numbers? Are we looking at fewer refineries shut down because of steps that have been taken up to this point?

And then the specific question: There was a statistic I think in some of the materials saying the 40 to 50 percent strengthening number for facilities, but my understanding from your comments is that this will not all be in place for this season. Is that correct?

MR. DANENBERGER: Yeah, on -- as far as the general question goes, I can speak briefly for the offshore sector, and then Red and Kevin can say more about onshore and the infrastructure there.

If we get two Category 5's again there's going to be, of course, substantial shut -in because most of the facilities will be evacuated, and there'll still be substantial damage to facilities. Hopefully everyone all being safely evacuated and all the production will have been safely shut in. It'll be just a matter of how fast the recovery would be. And that's impossible to predict at this point.

A lot of work is being done. It's not -- we're not at a point yet where we can say that storms like this, production will be quickly resumed and no problems.

In terms of the strengthening, that applies to the mooring systems for the mobile drilling units. And, no, that work hasn't all been finished. It's in progress. So by the end of the hurricane season I think at least 50 percent of that work will be done.

What we're looking at case by case until then is, how will that facility perform? How will that mobile drilling unit perform at that location? What are the risks? What type of storm will it be able to survive without any problems? How close is it to other facilities, pipelines?

So we're looking at a whole range of issues for each proposed operation with a drilling unit, and then we'll decide whether it's appropriate for the hurricane season.

MR. MALCOMB: Yes, Tom.

Q: Tom Doggett with Reuters. This is for Kevin. Has the DOE made any changes to its procedures or criteria for making loans from the Strategic Petroleum Reserve this year if necessary? In other words, have you sped up the review process or any steps to get the oil out quicker?

MR. KOLEVAR: No, we haven't. But particularly with respect to the loan process, I don't see that as necessary, Tom. That's an authority that the secretary has and is able to exercise on a moment's notice. He did so last year, and he'll be prepared to do this year.

Q: So we'll be prepared to do it again, as you say, but normally I think it takes about 13 or 14 days for the whole process?

MR. KOLEVAR: That's for a sale from the Strategic Petroleum Reserve. For a loan, in which case you'd negotiate a payback -- you know, what the sector is going to pay back and what the company is going to pay back, and interest, additional oil inventory, if you will -- that's a capability the department can make, has exercised a number of times over the last several years, and can be moved on very quickly.

MR. MALCOMB: Yes?

Q: Will Watson with -- (off mike) -- magazine. This is for Mr. Cavaney. One vulnerability that wasn't addressed is the Louisiana Offshore Oil Port. I don't know whether that falls under what we're talking about here today, but given LOOP's very special nature, has anything been done to harden it? It dodged bullets last year, but -

MR. CAVANEY: Well, literally -- you can't do everything at once -- but we literally have a checklist, and there are a number of conferences. I think the next one is coming up on June the 5th -- again another one, and Howard over there and others of us can talk to that. We're going through this step by step by step and trying to improve in all areas.

The one thing I think it's important to remember is we had those three hurricanes, but if you went and analyzed each of them, they all had different effects and behaved differently. So it's really hard to actually go down a list and say, I'm going to tackle these things in this order and get them done, because the next hurricane, you know, may be a bit different.

But you raise a very, very important issue. LOOP is critical to the country and to the industry, and it is a big priority to make sure that we don't end up in a circumstance where it's offline any longer than absolutely necessary. And I know they're looking into a number of things there. I will be glad, if you give me your card afterwards, to stay in touch with you in that regard.

MR. MALCOMB: Yes?

Q: (Off mike.) Red, could you address the onshore issue of refineries? What was the structural damage that was -- primarily levee or winds, and how are those being addressed?

MR. CAVANEY: I'll make some comments and then Kevin can speak to a bunch of those as well.

If you had to say in one word what was the damage, it was water. Refineries, for as large as they are, are inordinately complex, and, essentially, everything is driven by electrical systems and

the like. And so the water damage was something that there were refineries that had no damage from wind or from rain in itself, but the water that pooled and collected in various kinds of areas actually got at various systems and they had to be totally removed. Some of them could be de-watered over time, but it took a long, long time.

So there are efforts under way, and in some instances where certain portions of the facilities have been hardened, shall we say, larger dams or berms built around them. Some people have even relocated some units, you know, slightly higher, raised them off the ground. So each individual company is trying to assess that. But very clearly, the water damage to the electrical system was quite large.

And I think if you looked at it from a standpoint of overall structural damage, that was a lot less than many people anticipated on first blush.

Kevin, do you want to -

MR. KOLEVAR: Yeah. I mean, a good example of that is what happened at Chevron's Pascagoula facility. That was flooded out during Hurricane Georges in '99. And when saltwater gets into the engines that drive these pumps, they're done. They will fail, and so they have to be replaced. And they had to replace several thousand motors and it took many months.

They constructed a large berm around their sensitive areas. Now because of the level of the seawater surge, that berm was breached in one area, but the number of motors damaged was in the low hundreds. And so they were able to get things on much more quickly -- certainly more quickly than they would have been able to do had they not had that berm.

They've been undertaking repairs of that and making that berm even more significant in advance of this storm season. So you know, these companies are working hard. They know that if they -- you know, they're not putting people to work unless these things are running every day. So that's their goal.

Q: As far as the equipment and the engines and the motors, are there stockpiles of these available?

MR. CAVANEY: No, Jerry (sp), that was one of the big problems that we had was, in essence, there were stockpiles of some things. And the industry has a good history of being able to share and trade various equipment when it's needed, but here was a case where some of that happened very early on.

But the biggest challenge was not so much the stockpiling, but it was getting the work forces to come back in and the contractors who were able to do all the work that was just described by Kevin -- as you can imagine, these people were on call and had, you know, back orders and backlogs to as far as you can see.

And so the early projections about when some of the refineries in particular would come on, I think it affected also the offshore as well. They lagged, but the reason they lagged wasn't a lack

of understanding necessarily what needed to be done, it's because there just wasn't the work force and the necessary backup equipment readily available.

MR. MALCOMB: Yes.

Q: Ben Geman (sp) with Environment Energy Publishing. This is a question for Mr. Cavaney and Mr. Danenberger.

If you were to list -- if you wanted to say the most significant one or two steps that have been taken among the several that you walked us through that would provide better reinforcements or a better situation than last year, what would be the top one or two things you would mention?

MR. CAVANEY: I'd say from my standpoint, and Bud mentioned in his remarks, the two new standards that were out for jack-up rigs and mobile offshore rigs, those were identified as critical. There were a number of cases where I think people were surprised the extent to which those things moved or could drift. And so those new practices being up were sort of number one, I think, on our list, and we're very pleased that everybody got together.

It's unprecedented to be able to in such a short period of time have a standard that -- and again, standards aren't, gee, we have the standard on a five-to-four vote among experts. They're essentially a consensus among government, industry and everything, so they're not easy to achieve. But here I think they did a tremendous job.

Bud?

MR. DANENBERGER: Yeah, I would agree fully. I'm a regulator and I know how long it takes for these regulations and standards, and this was unprecedented. The jack-up recommended practice was produced in 39 days, and it's an outstanding document. It's not just something that was slapped together.

We pulled everybody together. It was led by Bill Hedger (sp) from -- (inaudible) -- Drilling. He did an exceptional job, pulled everybody together. Everybody knew it had to be done and it got done. And the same with the floaters standard -- a tremendous amount of work, and it's hard to bring all these experts together with a consensus that fast. So I would agree.

And also, there's a lot of work that's being done for little things like tying down equipment on platforms. Look at Mars. You see damage back there. Mars, the structure, performed great. It's a tension leg platform. It's an innovative deep-water structure. It performed great. But the rig got knocked over and so there was a lot of damage to the facility from that and it's just coming back on production. So everybody's taking a close look at tying down drilling and production systems.

MR. MALCOMB: Do we have a question on the phone?

OPERATOR: We have a question from the line of Pam Russell from The Times-Picayune. Please proceed.

Q: Yes, this is Pam Russell. I was wondering: If there's 10 percent of production still down, how does that break out? Where is that 10 percent shut-in still coming from?

MR. DANENBERGER: Now we're talking about on the OCS. And it's still, actually -- well, the gas is right around 10 percent or a little less. And that's dispersed widely in the Gulf and some of it may never come back on. It's associated with facilities that it wouldn't be commercial to bring them back on stream.

The oil production, most of it was associated with Mars. And now that Mars is ramping up; we expect that soon the oil shut-in will be less than 10 percent and then will be similar to the gas where it's dispersed and some of it won't come back onto production.

MR. MALCOMB: And MMS will have a news release on that in more detail in a few days.

Yes?

Q: (Off mike) -- with Bloomberg News. I wondered -- Red, you mentioned that another RP was coming. I wondered if you could give us a preview as to what that would deal with? And also, I wanted to see if you guys had figures for how many rigs had broken loose as a result of these storms?

MR. CAVANEY: I don't have the figures right with me. Bud probably can give you exact figures there. And if you'd like to afterwards, we can sit down over here aside and just tell you the number of new -- how should we say -- efforts that are working under way at standards that are in process. Again, it's a collaborative process. And so the extent to which something's going to move forward depends on the alignment of all the interested parties towards getting a solution. So it's a little hard for me to say exactly what might be the next one that'll finish up and come out, or the next one after that, but there are several others being looked at. And we'll share with you.

I might make a point, too. If you'll go to our website, which is api.org/pub -- P-U-B -- you'll actually be able to find these and other information on what's being worked on. And if it can't be answered there, please just let any of us know and I'll give you my card afterwards.

Q: Hi. Joel Kirkland (sp) with Platts as well.

I wanted to ask you about electric generation. That was -- I don't know if this has been talked about yet or not, but that was a problem with Colonial Pipeline and it's a critical aspect of getting pipelines back up and going. Could you just talk about the procedures for doing that, for getting the amount of electric generation that you need? And also, just the status of electric generation down there right now. Thanks.

MR. CAVANEY: I can comment on one. One of the initial problems was one of confusion. And oftentimes it's referred to in combat as the haze of war. Any time you go in and experience, like the first 24 or 48 hours after something like this, there's a lot of confusion. And one of the early difficulties was, who had control of various generators that people thought were in stock? You know, did the state preempt the federal? So there was some difficulty on how the

coordination would act like this where you could bring generators to bear where they were needed. A lot of effort has been expended to go and ensure that those lines of communications and lines of authority are very, very clear.

The pipelines feel fairly good about their circumstance, speaking particularly for the liquid pipelines, which are the ones that we have the responsibility for. And the other thing I want to raise is some people have taken the point that bringing on additional backup generators is the be all and end all. It really isn't necessarily the solution to all problems.

For example, you know, you look at the retail gasoline outlets. There are tens of tens of thousands of those sprinkled throughout the impacted areas. And the idea of bringing on backup generators at that level, because if you can move the product, you still need to get it to the local community that's been affected, you know, through the retail hub. And it's very costly. It's very complex and will take a long time to do.

So what we're trying to do is to work with the individual states there about, what are the best ways to actually get that product not only from the refinery through the pipelines, but actually out into retail. We are very fortunate, I think, that there were relatively few dislocations in terms of service over that whole period, not only outside the impacted area but even in the impacted area.

One other problem I might mention that we had with pipelines and product that sort of mix is we were able to import significant amounts of gasoline as a result of the government being very responsive in terms of granting waivers. That allowed us to bring in a surplus of gasoline which existed in Europe, which is actually moving towards dieselization. But it was much, much more difficult, because they're moving to dieselization; there's very little surplus diesel fuel available at almost any price, so to speak. And so as a result, there was a big difference in price between gasoline and diesel during a period of time and it had to do with the law of supply and demand, because there were just a whole lot more supply available for gasoline than there was for diesel.

And that's going to be a going forward concern, because, as I said, Europe is going through this whole situation where they're bringing more and more diesels and less and less gasoline. And we've just gone to two new regulatory desulfurization efforts significantly reducing the amount of sulfur in diesel down to the lowest in the world. So that will make it even harder for us to bring in diesel, where gasoline, we're about competitive with Europe and we expect other offshore producers to be able to make enough supply to bring it here.

But were it not for those waivers and those imports coming in, the amount that was shut in or caught in the refineries would have never been able to be replaced. And so while prices did go up, they came down almost as fast and most people did have the fuel they needed -- unfortunately, at a higher price than they wanted to pay. But that's what clears the market.

MR. KOLEVAR: Can I make a point about Colonial? And Red was being a little generous with respect to how the government was acting here. I mean, the fact is, at the Energy Department and other places, you understand the pipelines are crucial to move the product to market, and Colonial is the largest that moves the product into the East. Nobody had ever anticipated that that

would lose seven pumping stations along its route. And if they lose a couple, they can still push that product through. And so it was a real surprise.

And, frankly, Colonial had contracted four of their generators, and FEMA, when they came in, confiscated a good deal of those generators for emergency medical services and the like. But it did set us scrambling because we realized that, you know, when they brought the scope of the situation to our attention, that we needed to move quickly with them to procure new generators and to get electrical service back into -- particularly the Collins area, to get those pipelines back up and running. The generation capacity -- the generators required for the pipeline are massive; they're two-megawatt generators. And generators alone would not move the kind of product that was needed to stabilize the markets in the Midwest and East Coast.

And so once we worked with them and got the generators back online, that was a big day, frankly, because it did get the product moving again. But it was equally important to get grid connection reestablished for that and for the smaller Plantation pipeline, which runs parallel to the Colonial line.

Q: Correct me if I'm wrong, but there was a fairly major communication gap with that episode. I mean, has that been fixed, or --

MR. KOLEVAR: Yeah, the problem -- the primary problem we faced there was that the devastation was so complete in that area that it was very difficult getting in touch with the electric utility, a co-op that serviced the Collins pipeline pumping station and the Plantation pipeline pumping station, which is right across the street. And so we had to find these guys and get them back, you know, frankly, and they had to take care of their families and come back in. And so it was a real challenge, and communications were down. Cell phone towers were nonexistent. And it took a long, concerted effort.

And the pipeline guys were there every day working on their solutions and, frankly, the utilities -- Entergy, Mississippi Power, and then the co-ops themselves -- put in what I considered to be, you know, a heroic amount of work to get that facility back online and hard-wired so we could begin moving product again.

MR. MALCOMB: Yes?

Q: Stephanie -- (off mike) -- again. I just wanted to touch on the impact to gasoline prices that could be possible if we see another devastating hurricane season. Obviously, there's a lot of scrutiny right now to gasoline prices, and following the hurricanes last year, there were some prices increases that pretty much came back down once things started getting back online. But can you address for consumers whether it's just a fact they're going to have to face -- if there are significant hurricanes, prices will go up beyond where they are now? And what can be done or has been done to try and soften any kind of an impact?

MR. CAVANEY: I'd come in on the first issue.

Of all the entities that deserve a big pat on the back as a result of the last couple of hurricanes we went through, the American public is among those. The biggest problem you have in something like this is what we will call panic, which then turns into panic buying. And luckily, even though there was a few isolated circumstances where local media reports came up and so forth, we experienced virtually no panic buying. And there is no way that the distribution system can be full enough to allow every individual American to fill up their gas tank and go from there.

And so what it really -- to answer your question, it starts with individual human behavior and confidence in the system -- those of us up here at the table and the people that we represent doing their job well. And that's exactly what happened here, is that people came in, got the gas that they needed. You know, they didn't panic; they didn't go around and start something that we just couldn't have fulfilled even under normal conditions. So first of all, it would be impossible to say what price, even if I was in a position to do so.

So the first thing is don't panic, have confidence, take your cue off how the government, how the media's reporting, how the industry's reacting, and sense your own circumstance.

The second is what price does is it basically attracts product into a high-risk environment, and it happens not only when you have a natural disaster, but it'll sometimes happen when a refinery or a pipeline servicing a part of the country goes down for an unplanned reason. And so you are always almost going to see some level of a price movement in there because that tells someone, well, instead of delivering my product over here where, you know, they need it but could get along without out it for a couple more days, I'm going to send it over here.

And you made a good point; the fact that the system works well is the price goes up, the product rushes in, there's enough product, it fills the demand, and then it goes right back down -- which it did in the case of the hurricane; it came down almost exactly where it started, over a short period of time.

So it's inconvenient, we know it's painful during that period of time, but the free market system works better for all consumers than any elaborate scheme somebody might have about trying to distribute and move product so that everybody gets their, quote, unquote, "fair share."

MR. MALCOMB: Yes?

Q: Jamie Webster from Vargas Media. You've spent a lot of time talking about everything you've done for this upcoming hurricane season. I wonder -- specifically for Red, but I'd appreciate an answer from anyone -- what changes do you see occurring over, say, the next three hurricane seasons? Or where do you see us in three to five years, as opposed to where we were last year or this upcoming year?

MR. CAVANEY: I'll make a point on one element that I think needed significant improvement. A lot of us didn't anticipate it, and I don't think it'll all be proved just because it wasn't there, and that was communications. I mean, we've all become so accustomed to the convenience of our cell phone or our walkie-talkies, our capacity to use local area networks. Those

were all gone in many of these areas, as Kevin said. I mean, the devastation was pretty much complete, and so you couldn't even talk to people.

So one of the things I know that a lot of our companies have spent a lot of effort on is making sure that they can establish lines of communication that will withstand these kind of hurricanes and this kind of damage and all. So again, that's not a one-year effort. It's going to be a continuous view because, at the end of the day, the companies' capacity to respond is a function of getting their people and finding out are they okay? Do they have a house? If they don't, what do they need? Because the first thing we need to do is to take care of the people who have responsibility to their families. And once that's done, you know, then they'll come back and start to work on the other things that need to be done.

So communications, I think, was one of the really big surprises. When you factor in that communications/the human element, those were critical, and I think we can make big improvements there.

MR. KOLEVAR: Yeah, I would echo that. There is a technological challenge that won't be solved by this summer. It will take a couple of years. But the fact is that all the tools you have for backup that we had last year, none of them are perfect, whether it's satellite phones or GETS (ph) capability and the like. And people did some improvised workarounds, finding out text messages could work here or there, whether from a cell phone or a BlackBerry or the like.

But I think one of the biggest differences we're going to see this year are the efforts by companies in the petroleum sector, natural gas and electrical sector to establish redundant backup communications, whether they're fiber optic lines that are now strung underwater or, you know, shortwave radio and the like. That, I think, is going to have the biggest near-term impact in the sector's ability to recover. And it won't be perfect. It will -- particularly in the first 24, 36 hours, it will be very confused, as people are scattered to the -- you know, outside of the region and are looking to come back in. But I think it will be better the next year, and I think it will get a little bit better every year after, as we continue to address the technical challenges of enhanced communications when you have no cell towers and no fuel to run existing radio towers and the like.

MR. DANENBERGER: From an offshore standpoint, the main improvements will be, one, firstly, implementation of these mobile drilling units, station-keeping, recommended practices and all the work that's ongoing now on those. And then the completion of the RP-2 series of standards for design of offshore facilities and implementation of those with the new Metocean criteria, and a lot of pipeline work and investigation that's ongoing for offshore pipelines, and some changes in standards there. So there's still a lot of work to be done.

MR. MALCOMB: Yes?

MR. CAVANEY: I wonder if I -- just one follow-up. With regard to your question earlier on the number of failures, it was six station-keeping failures during Katrina and 13 during Rita.

MR. MALCOMB: Yes?

Q: David Ivanovich, Houston Chronicle. Red, you mentioned this and I wanted to get a clarification on something. You were talking about the blow to the gasoline market last year being softened by the fact that we had surplus gasoline in Europe because of their move to more diesel. Are the conditions such this year that if we were to have hurricanes again, we would have excess supplies again, or have those supplies dissipated?

MR. CAVANEY: Fortunately, over the last several months we have been importing record amounts of gasoline, so there's every reason to believe that that gasoline's still available if we need it here. As was mentioned, only in the last couple of weeks have the remaining three refineries started to come back, and one of those, of course, was a huge one coming back. So that loss, shall we say, was made up by those imports. So as these refineries, which are now ramping back up to their capacity, get there, then that's going to create this surplus that'll be camped out over in Europe. So that's a nice -- a nice piece. So gasoline, I think, looks good as a safeguard, if we have to import more and get the response out of the government, which was just terrific in terms of the waivers and the logistics that were needed.

MR. MALCOMB: Yes, Tom?

Q: Tom Doggett with Reuters again. To Kevin and Red -- this is on gasoline prices -- I think what most consumers remember from last year's hurricane is those who live far inland and even up the East Coast, up to Washington, that because of the disruption, the refineries that were shut down -- and the Colonial and Plantation pipelines -- that the price shot up a lot and it went down eventually over time, and there were some supply disruptions at some of the stations. So why shouldn't consumers think, "I need to go out before this hurricane actually hits and fill up my tank"? I mean, to them it makes a lot of sense because they know the price is going to go up. So what do you say to them?

MR. KOLEVAR: I think the response would be to show the kind of judgment that was shown last year. In the wake of the storms and in appreciation of the damage, the president publicly asked that people conserve fuel. A number of governors did the same, and took affirmative actions to decrease their state government consumption of fuel. And so it's important that the public work with us and recognize that while there are things that we can do as a government, certainly the industry will be working hard to get these facilities back online. There's a public-sector responsibility, too, to do their part. And if we all work together, then I think we'll see the kind of positive results that we saw last year -- you know, spot disruptions at best. And while there was a small initial spike, that did come back down. I don't think it took as long as you might imply, Tom; I think it was a little quicker. But the fact is that, given the scope of the damage, the price adjustments that we saw were very modest, and I think a large part of the credit goes to the American consumer for acting responsibly and understanding that they had a role in conserving fuel supplies and keeping this from turning into a more serious situation.

MR. MALCOMB: Yes?

Q: Hi. Meghan O'Connell, UPI. Besides tactically refining communications inside the organization, have you taken any steps to contact other organizations and strengthen relationships so that you can coordinate in emergency responses?

MR. KOLEVAR: Yeah, I will tell you, you've heard -- I mentioned it, I know Red has mentioned it. And in a vacuum, when you say, well, there have been all these conferences, probably a common reaction is, you know, great, you know, more fancy conferences. (Laughter.) But I will tell you, one of the -- one of the chief lessons learned from these hurricanes last year was that the energy sector is a system and it is a highly interdependent system, and it was not -- and this was really one of the messages from the first conference that was held in Mississippi -- it is not enough to know your neighboring utility or the utility that provides power to your particular refinery or one or two public utility commissioners. It is more important than ever that companies establish new relationships with the federal entities that they may not have worked closely with, with the state governments, with other -- in the oil sector, with other companies, because they can share assets and assist one another back and forth.

And so, really, two actions: reestablishing old relationships to the extent that they existed, and forging new ones with clear and well-understood lines of communication so that you can get in touch with a person that is going to be of vital importance to your company, whether it is, you know, a neighboring refinery owned by another company a couple of miles away; whether it is your utility service provider or another utility service provider that's close by; whether it is your federal, state or local governments.

MR. MALCOMB: We have time for one more. Yes?

Q: This is for Red and Bud. A lot of the platforms that were destroyed last year were built -- were very old. They were built before the 1988 rules tightening construction standards. Of the universe of working platforms that are up there now, how many of them are that old? And is anything beyond these new guidelines being done to strengthen those?

MR. CAVANEY: I think one of the things, and Bud had mentioned it, you really are doing, in some cases, a cost-benefit analysis on some of those because the older the structures, the -- I'm going to generalize for the purpose of making a point here -- but the older the structure, usually the closer inshore and the less challenged an environment. And I know in a couple of circumstances where the companies have just said there isn't the future -- you can't monetize our investment, if we were to have to go back and make this to today's standards. So some number, and I'm not sure exactly what it is -- we don't keep that till after the fact -- just are not going to come back.

Bud, do you want to --

MR. DANENBERGER: Yeah, there are still a substantial number of those older platforms. Of course, they've survived a number of hurricanes now, so maybe they were over-designed quite a bit. But we look at those whenever there's some sort of a proposal for an additional use of that, either they want to add a rig or they want to drill some additional wells. We do a structural review to make sure that that should be allowed. And if we don't think they're up to current capabilities, we don't permit the additional use.

As to the newer structures, other than typhoon, they all performed very well, except for a few that were built to -- they were actually, I think, design-criteria-reduced because of low risk, low

consequence. So we're taking a look at this consequence-based design issue, too, since there are consequences in addition to safety and environment that have to be considered -- you know, sustaining production and hazards of navigation, that kind of things.

MR. MALCOMB: This concludes our event. Thank you very much for your interest and your attendance.

Gentlemen, thank you for your participation.

(END)